

METHOD FOR SELECTIVE GRAFT POLYMERIZATION

ABSTRACT

[0001] The invention relates to a method of making an acrylic graft polymer, especially a urethanized acrylic graft polymer. The method of the invention requires an ethylenically unsaturated monomer mixture (a) comprising a monomer (ai) of a particular structure having at least one cyclic carbonate group and the polymerization of the monomer mixture (a) under free radical polymerization conditions to make an acrylic backbone polymer (b) comprising one or more cyclic carbonate functional groups (bi). At least one grafting moiety (c) is then provided, said grafting moiety (c) comprising at least one amine group (ci) selected from primary amines, secondary amines, and mixtures of both primary and secondary amines. The grafting moiety (c) is then grafted onto acrylic backbone polymer (b) via reaction between the at least one amine group (ci) and cyclic carbonate functional groups (bi) so as to make an urethanized acrylic graft polymer.